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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,270	05/23/2005	Hidenori Nakajima	260617US0PCT	5020

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OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER
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MITRA, RITA

ART UNIT	PAPER NUMBER
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1656

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	04/12/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 04/12/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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oblonpat@oblon.com  
jgardner@oblon.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/511,270	<b>Applicant(s)</b> NAKAJIMA ET AL.	
	<b>Examiner</b> Rita Mitra	<b>Art Unit</b> 1656	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 08 February 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 20-47 is/are pending in the application.
- 4a) Of the above claim(s) 29 and 31-45 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 46 is/are allowed.
- 6) ☒ Claim(s) 20-28, 30 and 47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                                    |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                                   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                               | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>5/23/2005</u> . | 6) <input type="checkbox"/> Other: _____                                                |

### **DETAILED ACTION**

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 8, 2007 has been entered.

#### ***Status of the Claims***

Applicants' amendment in response to Advisory Action mailed December 20, 2006, filed on February 8, 2007 is acknowledged. Claims 20, 27, 31 and 42 have been amended. New claims 46 and 47 have been added. Therefore, claims 20-28, 30 and 44-47 are under examination.

#### ***Response to Amendments and Remarks***

##### **Restriction/Election**

Applicant's election with traverse of Group I (claims 1, 2, 4, 5, 7 and 18 as drawn to the polynucleotide encoding a polypeptide, and SEQ ID NO: 1) in response to Office Action mailed September 9, 2005, filed on September 21 2005 is acknowledged. It should be noted that the traversal was addressed in the office action mailed March 13, 2006 and claims 3, 6, 8-17 and 19 were withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a non-elected invention and restriction requirement was made FINAL.

Regarding rejoining the method claims 29, 40, 42, 43 and 45 and composition claims 44 and 45. Applicants' request has been considered but except claim 29 no other claims can be rejoined because method claims 40, 42, 43 and composition claims 44 and 45 require product of non-elected claims. Upon finding the allowability of product claim 20, method claim 29 will be rejoined. Therefore lack of unity is deemed proper and is therefore made **FINAL**.

Of the pending claims 20-47, claims 29, 31-45 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a non-elected invention. Therefore, claims 20-28, 30, 46 and 47 are currently under consideration. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

### **Objection to the Specification**

Objection to the specification is withdrawn in view of amendment.

### **Claim Rejections – 35 USC § 112, First Paragraph**

Rejection of claims 20, 21, 25, 26, 30 and 44 under 35 USC § 112, First Paragraph scope of enablement and written description, is withdrawn in view of amendment to the claims and remarks on pages 11-13 of the current 'Response.'

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21 (2) of such treaty in the English language.

b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 20-28, 30, 47 remain/are rejected under 35 U.S.C. 102(a) and (e) as being clearly anticipated by Tang et al. and by Strausberg et al.

Tang et al. (US 60/336,453) disclose a polynucleotide sequence (sequence 103) with 96.6% sequence identity to the elected polynucleotide of the invention designated as SEQ ID NO: 1. This clearly anticipates claims 20, 21, 22, 24, 27, 28 under 102 (a).

Tang et al. (US 60/336,453) disclose a polynucleotide sequence encoding a protein that comprises an amino acid sequence of SEQ ID NO: 2 with 99.6% sequence identity to the peptide of the invention designated as SEQ ID NO: 2. This clearly anticipates claim 20, 23, 25, 26 under 102(e).

Stausberg et al. (2002) disclose a polynucleotide sequence (accession BC045550) with 96.6% sequence identity to the elected polynucleotide of the invention designated as SEQ ID NO: 1. This clearly anticipates claims 20, 21, 22, 24 under 102 (a).

Strausberg et al. (2002) disclose a polynucleotide sequence encoding a protein that comprises an amino acid sequence of SEQ ID NO: 2 with 100% sequence identity to the elected peptide of the invention designated as SEQ ID NO: 2. This clearly anticipates claims 20, 23, 25, 26 under 102(e).

Applicants have stated at page 9 that this rejection using Tang reference would not apply to the new claims, which require that the polynucleotide encodes a polypeptide that binds to WF00144. This argument is not persuasive because the property of binding is inherent.

Similar consideration is applied to Strausberg because this reference teaches a polynucleotide that has 96.6% sequence identity to SEQ ID NO: 1, wherein the polynucleotide encoding a protein that comprises an amino acid sequence which has 100% sequence identity to SEQ ID NO: 2.

Applicants urge that Tang et al. disclose a huge genus of DNA sequences and does not specifically suggest the subgenus of polynucleotides that would bind WF00144. Tang et al. do disclose a polynucleotide encoding a polypeptide having 99.6% identity to SEQ ID NO: 2, and 96.6% sequence identity to the polynucleotide encoding SEQ ID NO: 2, which is the nucleotide sequence of SEQ ID NO: 1. Therefore, the function of binding to WF00144 is an inherent property of the encoded polypeptide and Tang et al. remains art against the invention.

Applicants urge that Stausberg et al. disclose over 15,000 cDNA sequences and therefore discloses a huge genus of DNA sequences and does not specifically suggest the subgenus of polynucleotides that would bind WF00144. Tang et al. do disclose a polynucleotide encoding a polypeptide having 100% identity to SEQ ID NO: 2, and 96.6% sequence identity to the polynucleotide encoding SEQ ID NO: 2, which is the nucleotide sequence of SEQ ID NO: 1. Therefore, the function of binding to WF00144 is an inherent property of the encoded polypeptide and Strausberg et al. remains art against the invention.

Claims 21 and 30 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Valenzuela et al. (2000). Claim 21 as reads on glycine. Valenzuela et al. (2000) disclose a polynucleotide sequence (accession AAA93103) with 100% sequence identity to the base sequence complementary to the elected polynucleotide of the invention designated as SEQ ID NO: 1, and having at least 19 bases. This clearly anticipates claim 30 under 102(b).

Applicants urge that Valenzuela et al. do not teach isolated nucleic acid sequences having at least 15 nucleotides of SEQ ID NO: 1. The claims recite “fragments consisting of at least” and is therefore the claim language is “open” inspite of the phrase ‘consisting of’.

### ***Conclusion***

Claims 20-28, 30 and 47 are rejected. Claim 46 is allowable.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

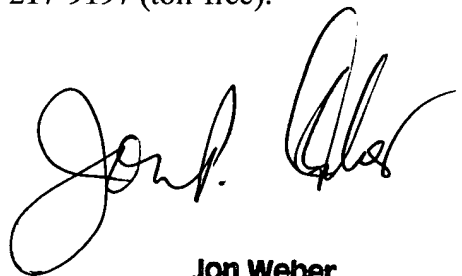
however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

*Inquiries*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rita Mitra whose telephone number is 571-272-0954. The examiner can normally be reached on M-F, 10:00 am-7:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Jon Weber can be reached on 571-272-0925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rita Mitra, Ph.D.  
March 31, 2007

A handwritten signature in black ink, appearing to read "Jon Weber", with a large, stylized loop at the end.

**Jon Weber**  
**Supervisory Patent Examiner**